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## Startups and older firms: which is more responsive to local economic changes?

*[Ann Norris](#)*

In recent years, the words “entrepreneur” and “startup” have been considered nearly synonymous with job creation and economic growth. In today’s postrecession environment, much focus has been placed on the ability of new businesses to thrive despite challenging economic factors, whether local or national. In “[Firm age, investment opportunities, and job creation](#)” (National Bureau of Economic Research working paper no. 19845, January 2014), authors Manuel Adelino, Song Ma, and David T. Robinson discuss firm age and how this relates to firms’ responses to local investment opportunities. The authors explore the notion that new firms—being less bureaucratic and more flexible—are better equipped than older firms to handle exogenous changes to the local business environment. In contrast, older businesses are stable and presumably have more access to capital than their younger counterparts, so it is popularly believed that older businesses are better equipped to deal with exogenous economic shocks.

A few different conditions are used to explore the underlying hypothesis that younger firms are more responsive to changes in local investment opportunities. First, changes to local income are measured by examining both national manufacturing employment and the preexisting manufacturing sector in commuting zones (CZs). The Department of Agriculture defines CZs as a region that enables workers to travel easily for employment; these regions comprise an average of five counties. CZs represent economic boundaries better than do existing county or political boundaries. Next, employment growth is examined to see how firms of different ages respond to changes in local income. The nontradable sector is used because it does not take into account technological or product innovation, two advantages that are often associated with startups. (Nontradables are services or items with a high cost of transport and therefore tend to be local in nature.) The data for employment by firm age come from the Quarterly Workforce Indicators, published by the Longitudinal Employer–Household Dynamics (LEHD) program of the U.S. Census Bureau.

Using the LEHD dataset for CZs, firm-age categories are defined as follows: up to 1 year (young firms), 2–3 years, 4–5 years, 6–10 years, and 11 years or older. The 2-year net job creation for each category shows that the youngest firms create the most jobs on average, while older firms lose jobs over the same 2-year period. In short, young firms create the most new jobs in the nontradable sector even though these firms account for just 6 percent of total employment in the nontradable sector. To measure income growth in the same LEHD dataset, a 2-year growth rate is used. Using regression analysis, a strong, positive causal relationship is shown between local job creation and income growth for young firms. While firms 6 years and older also show a positive job creation–income growth relationship, the correlation is smaller than that for younger firms. The authors further divide the dataset into “good times” and “bad times” and then examine income growth periods in the top and bottom terciles. The findings show that young firms create more jobs when times are good compared with older firms, meaning startups are more responsive to high-investment opportunities.

Financing is a hot topic among startups and entrepreneurs. Aside from job creation and income changes within CZs, access to financing must be taken into consideration to answer the initial

hypothesis. Using Federal Deposit Insurance Corporation (FDIC) data to identify access to financing, local banks are identified within the CZs and are defined as a bank that has at least 75 percent of its deposits located in a single CZ. As possible proof that local banks are important to young firms, a positive correlation between startup employment and the share of local banks was shown by regression analysis; a negative correlation was present for older firms.

The authors look at firm size in addition to firm age with the use of U.S. Census Business Dynamic Statistics. While this data set uses Metropolitan Statistical Area data and does not differentiate between the tradable and nontradable sectors, it classifies firms into three size categories: fewer than 20 employees, between 20 and 100 employees, and more than 100 employees. The same regression model used for changes in job creation and income growth reveals that younger firms with fewer than 20 employees are the most responsive to local investment opportunities, and older firms with more than 100 employees are responsive as well.

Although popular perception is that *small* firms are the major contributors to job growth, authors Adelino, Ma, and Robinson conclude their paper with the reaffirmation that in the nontradable sector, *young* firms create more jobs, are more responsive to economic changes, and show a stronger response toward local bank lending than older firms. It is noted that future work should continue to explore the differences between old and young firms and how their organizational differences may lead to increased or decreased responsiveness. Additionally, future research should go beyond the nontradable sector to answer questions about startups and innovation, flexibility, and incentives across industries.